

## BEST AVAILABLE COPY

### In the Claims:

1. (Currently amended) ~~Optical~~An optical arrangement comprising two parallel plates ~~(3, 5, 5')~~ each with a through-hole ~~(3A, 5A, 5'A)~~ forming an optical input/output with a given optical axis and an at least partly optical component ~~(4, 12)~~ placed between the plates, the at least partly optical component ~~(4, 12)~~ and a first plate of the two parallel plates ~~(3)~~ comprising first fastening studs ~~(8)~~ placed transversely opposite the plate and connected by first bumps ~~(7)~~ made of a meltable material that when molten is able to selectively wet these first fastening studs in order to optically align the component and the input/output of the first plate, and the two parallel plates ~~(3, 5, 5')~~ comprising second fastening studs ~~(11)~~ placed transversely opposite the plate and connected by second bumps ~~(10)~~ made of a meltable material that when molten is able to selectively wet the second fastening studs in order to optically align the inputs/outputs on the two parallel plates.

2. (Currently amended) ~~Arrangement~~The optical arrangement according to claim 1, ~~characterized in that~~ wherein the at least partially optical component it comprises a first and second optical components and wherein the second at least partly optical component (12) placed residing between the first component ~~(4)~~ and the second plate ~~(5')~~, the second component and one of the plates having third fastening studs ~~(15)~~ placed transversely opposite the plate and connected by third bumps ~~(14)~~ made of a meltable material that when molten is able to selectively wet the third fastening studs in order to optically align the second component and the input/output on the plate to which it is fixed by the third bumps.

3. (Currently amended) ~~Arrangement~~The optical arrangement according to claim 2, ~~characterized in that~~ wherein the second component (12) is fixed to the second plate (5') by the third bumps.

4. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 21 to 3, characterized in that~~ wherein each meltable

material (~~7, 10, 14~~) is selected from a group comprising indium, tin-lead, indium-lead, silver-tin, antimony-tin and tin-silver-copper alloys.

5. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 21 to 4~~, characterized in that ~~all of wherein the first, second, and third bumps (7, 10, 14) are made of~~ comprise the same meltable material.

6. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 21 to 5~~, characterized in that ~~wherein the first, second, and third fastening studs (8, 11, 15) are made of~~ comprise a material selected from a group comprising copper, nickel, silver and gold.

7. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 21 to 6~~, characterized in that ~~wherein~~ all of the fastening studs (~~8, 11, 15~~) ~~are made of~~ comprise the same material.

8. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 1 to 7~~, characterized in that ~~wherein~~ the first plate and the component each have an electrical interconnection network, ~~and wherein~~ the first fastening studs ~~are~~ comprise metal and are connected to a respective one of the networks, ~~and wherein~~ the meltable material being comprises an electric conductor.

9. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 1 to 8~~, characterized in that ~~wherein the~~ at least one at least partly optical component ~~is~~ comprises an optical filter.

10. (Currently amended) ~~Arrangement~~ The optical arrangement according to ~~any one of claims claim 1 to 8~~, characterized in that ~~wherein the~~ at least one at least partly optical component ~~is~~ comprises a variable optical attenuator.

11. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 8, characterized in that wherein the~~ at least one at least partly optical component ~~is~~comprises an electro-optic modulator.

12. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 8, characterized in that wherein the~~ at least one at least partly optical component ~~is~~comprises a wavelength-selective photodetector.

13. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 8, characterized in that wherein the~~ at least one at least partly optical component ~~is~~comprises an optically pumpable laser cavity.

14. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 8, characterized in that wherein the~~ at least one at least partly optical component ~~is~~comprises a micro-lens.

15. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 14, characterized in that wherein the~~ first component (4) is mounted between 10 and 100 microns away from the first plate (3).

16. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 15, characterized that wherein~~ each plate is ~~made of~~comprises silicon.

17. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 16, characterized in that it also comprises further~~ comprising a fibre (6, 9) engaged in at least one of the through-holes forming the inputs/outputs.

18. (Currently amended) ~~Arrangement~~The optical arrangement according to ~~any one of claims claim 1 to 17, characterized in that wherein~~ at least one of the through-holes forming the inputs/outputs is filled with a material that is transparent to light signals.

19. (Currently amended) ~~Production~~ A production method for an arrangement comprising first and second plates and at least one at least partly optical component, ~~according to which the method comprising:~~

- [[•]] (a) forming a hole (3A, 5A, 5'A) designed to form an optical input/output ~~is made~~ in each of ~~two~~ the first and second plates (3, 5, 5'),
- [[•]] (b) forming first fastening studs (8) ~~are formed~~ on the first plate and the component ~~and that~~ are adapted to be selectively wetted by a meltable material whilst the area around the studs is much less wettable by the material, the first fastening studs being placed so that they can come into opposite relationship transversely of the ~~plate~~ first and second plates,
- [[•]] (c) forming second fastening studs (11) ~~are formed~~ on the first and second plates ~~and that~~ are adapted to be selectively wetted by a meltable material whilst the area around the studs is much less wettable by the material, the second fastening studs being placed so that they can come into opposite relationship transversely of the first and second plates,
- [[•]] (d) placing disks (7) made of the meltable material that can selectively wet the first fastening studs ~~are placed between them and the first fastening studs that~~ are temporarily melted in order to passively align the component and the hole in the first plate,
- [[•]] (e) placing disks (10) made of the meltable material that can selectively wet the second fastening studs ~~are placed between them and the second fastening studs that~~ are temporarily melted in order to passively align the holes in the plates.

20. (Currently amended) ~~Method~~ The method according to claim 19, ~~according to which further comprising forming~~ third fastening studs (15) ~~are formed~~ on one of the first and second plates and a second component (12) ~~and that~~ are adapted to be selectively wetted by a meltable material whilst the area around the third fastening studs is much less wettable by the material, the third studs being placed so that they can come into opposite relationship transversely of the plate

and, before the ~~two~~ first and second plates are aligned with each other, placing disks (14) made of the meltable material that can selectively wet the third fastening studs ~~are placed between them and the first and second plates that are temporarily melted~~ in order to passively align the second component and the hole in the plate.

21. (Currently amended) A method~~Method~~ according to claim 20, ~~characterized in that wherein~~ the third fastening studs are formed on the at least one optical component and the second plate.

22. (Currently amended) A method~~Method~~ according to ~~any one of claims claim 19 to 21, characterized in that wherein~~ the disks ~~are made of~~ comprise the same material.

23. (Currently amended) The method~~Method~~ according to ~~any one of claims claim 20 19 to 22, characterized in that wherein~~ the first, second, and third fastening studs ~~are made of~~ comprise the same material.